

WHAT IS CLAIMED IS:

1 1. A method of securing a data transaction across a security barrier, the method
2 comprising:

3 validating a request message against a predefined request message specification;

4 transmitting the validated request message across the security barrier;

5 validating a response message against a predefined response message

6 specification, the response message corresponding to the validated

7 request; and

8 transmitting the validated response message across the security barrier.

1 2. A method as in claim 1,

2 wherein the request and response message specifications are predefined in

3 accordance with valid request and response message constraints specific to

4 an information resource.

1 3. A method as in claim 1,

2 wherein at least one of the request and response message specifications is

3 cryptographically secured.

1 4. A method as in claim 1, further comprising:

2 receiving, at an application proxy, an access request targeting an information
3 resource;

4 formatting the request message in a structured language corresponding to the
5 request message specification; and

6 transmitting the formatted request message to a secure data broker for the request
7 message validating.

1 5. A method as in claim 1, further comprising:

2 formatting the response message in a structured language corresponding to the

3 response message specification; and

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transmitting the formatted response message to a secure data broker for the response message validating.

6. A method as in claim 1, further comprising:
accessing an information resource in accordance with the validated request message; and
preparing the response message in accordance with the access.

7. A method as in claim 6,
wherein the response message is formatted in a structured language corresponding to the response message specification.

8. A method as in claim 1,
wherein the request message is formatted in a structured language corresponding to the request message specification; and
wherein the response message is formatted in a structured language corresponding to the response message specification.

9. A method as in claim 8,
wherein the structured languages corresponding to the request and response message specifications include an eXtensible Markup Language (XML).

10. A method as in claim 1,
wherein the request and the response message validatings are respectively performed at first and second secure data brokers on opposing sides of the security barrier; and
wherein the validated request and response message transmissions are between the first and second secure data brokers.

11. A method as in claim 1, wherein the request message validating includes:

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24. An information security system comprising:
a security barrier;
a proxy for an information resource, the proxy and the information resource on opposing first and second sides, respectively, of the security barrier;
a data broker on the first side of the security barrier, wherein, in response to an access request targeting the information resource, the data broker validates a request message against a predefined request message specification and forwards only validated request messages across the security barrier.

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the access requests across the security barrier toward the information resource; and

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the parser code including instructions executable as a first instance thereof to

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validate the received access requests against the predefined request

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message specification.

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31. The computer program product of claim 30, further comprising:

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an encoding of the predefined request message specification.

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32. The computer program product of claim 30,

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wherein the data broker code and parser code are also executable on a second

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network server separated from a client application by the security barrier;

4

wherein the data broker code includes instructions executable as a second instance

5

thereof to receive responses in a structured language corresponding to a

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predefined response message specification and to forward validated ones

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of the responses across the security barrier toward the client application;

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and

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wherein the parser code includes instructions executable as a second instance

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thereof to validate the received responses against the predefined response

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message specification.

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33. The computer program product of claim 32, further comprising:

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an encoding of the predefined response message specification.

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34. The computer program product of claim 30, further comprising:

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application proxy code including instructions executable to format the access

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requests in accordance with the structured language corresponding to the

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predefined request message specification.

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35. The computer program product of claim 30, encoded by or transmitted in at

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least one computer readable medium selected from the set of a disk, tape or other

- 3 magnetic, optical, or electronic storage medium and a network, wireline, wireless or other
4 communications medium.